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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/897,805	06/29/2001	Dan Higinbotham	6927.2	5824
21999	7590	08/10/2005	EXAMINER	
KIRTON AND MCCONKIE 1800 EAGLE GATE TOWER 60 EAST SOUTH TEMPLE P O BOX 45120 SALT LAKE CITY, UT 84145-0120			SHORTLEDGE, THOMAS E	
			ART UNIT	PAPER NUMBER
			2654	

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/897,805

Applicant(s)

HIGINBOTHAM, DAN

Examiner

Thomas E. Shortledge

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04/18/2005, and 04/28/2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,2,6-12,16-20,23-26 and 31-42 is/are pending in the application.
- 4a) Of the above claim(s) 36-41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,6-12,16-20,23-26 and 31-35 and 42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. This communication is in response to Remarks filed April 18<sup>th</sup>, 2005.
2. The objection to claim 34 has been withdrawn in accordance with the applicants' amendments.
3. Claims 1, 2, 4, 6-12, 16-20, 23-26, and 31-42 are pending in the application. Claims 1, 10, 19, 23, 31, 32, 36, 37, 39, 40, and 42 are independent.

### ***Election/Restrictions***

4. Claims 1, 2, 4, 6-12, 16-20, 23-26, and 42 (invention I) and newly submitted claims 36-41 (invention II) are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because invention I describes a system containing a computer, a workbench program with a text software application and a partial sentence translation application. The translation application is described with a very broad sense, not describing a detailed algorithm used in the translation. Such a description allows for any translation algorithm, able to perform the translation as described, to be applied to the system. The subcombination has separate utility such

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as a detailed algorithm for performing partial sentence translations that can be applied to any partial language translation system.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 36-41 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### ***Response to Arguments***

5. Applicant's arguments with respect to claim 1, 2, 4, 6-12, 16-20, 23-26, and 42 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 42 is rejected under 35 U.S.C. 102(b) as being anticipated by Adachi et al. (4,866,670).

As to claim 42, Adachi et al. teach:

a computer system containing a computer program (machine translation processor embodying the present invention, (Fig 1, element 10, and col.2, lines 61-61). It would have been obvious one of ordinary skill in the art that since the many elements are used to create the processor, computer code would be used allow for these elements to communicate, (Fig. 1));

a workbench program executable on said computerized workstation (an input unit connected to a edition control unit with access to the rest of the translation processes, Fig. 1, elements 12, and 32);

identifying text segments to be operated on (English sentence that is given via the input unit, col. 2, line 68 through col. 3 line 1);

a partial translation application operable with said workbench program and said writeable test data software application program, said partial sentence translation application comprised of computer readable code (translation unit connected to the edition control unit and translation memory unit, where the translation unit is able to divide the incoming sentence to perform partial translation processing, (Fig. 1, element 18,32 and 25, col. 3, lines 5-10). It would be inherent that since the partial translation is carried out within a processor, these units would contain computer readable code so that they would be able to communicate);

using an efficient algorithm to determine the set of all partial sentences of said text segment that have been translated before (a sentence division unit for processing the original sentence for division for performing partial translation processing in the translation unit, col. 3, lines 7-11), each such partial sentence being represented by at least one instance of such translation in a database of translated material (a translation memory, col. 3, lines 12-13), where

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partial sentences are defined to be subsegments of said text segment at least 2 words in length (the sentence is divided into phrases, those phrases being at least 2 words in length, col. 3, lines 55-60); and

displaying said text segment so that a translator which words of said text segment belong to partial sentences at least n words long that have been translated before (a display unit for displaying the translated sentence by partial sentence translation, col. 3, lines 14-17) and so that the translator can direct the system to display at least one instance of the longest partial sentence in said database of translated material that begins with any particular word in said text segment (the sentence is divided into phrases, then translated based on a partial sentence translation memory, the phrases are displayed to a user, where the user can judge whether the translation process is complete, col. 3, line 55 through col. 4, lines 1-3).

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. Claims 1, 2, 4, 8 – 12, 16-20, 23-26, and 31-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adachi et al. in view of Morohasi et al. (5,029,084) and in further view of Ho et al. (6,498,921).

As to claims 1, 10, 19, 23, 31, and 32, Adachi et al. teach

a computer system containing a computer program (machine translation processor embodying the present invention, (Fig 1, element 10, and col.2, lines 61-61). It would have been obvious one of ordinary skill in the art that since the many elements are used to create the processor, computer code would be used allow for these elements to communicate, (Fig. 1));

a workbench program executable on said computerized workstation (an input unit connected to a edition control unit with access to the rest of the translation processes, Fig. 1, elements 12, and 32);

identifying text segments to be operated on (English sentence that is given via the input unit, col. 2, line 68 through col. 3 line 1);

a partial translation application operable with said workbench program and said writeable test data software application program, said partial sentence translation application comprised of computer readable code (translation unit connected to the edition control unit and translation memory unit, where the translation unit is able to divide the incoming sentence to perform partial translation processing, (Fig. 1, element 18,32 and 25, col. 3, lines 5-10). It would be inherent that since the partial translation is carried out within a processor, these units would contain computer readable code so that they would be able to communicate);

interfacing with pre-existing workbench program stored and executed on said computer system, said workbench application program comprising at least one database of previously translated material (a translation processor containing a control unit, which is connected to a database, (Fig. 1, elements 32 and 16). It would have been obvious one of ordinary skill in the art that since the many elements are used to create the processor, computer code would be used allow for these elements to communicate, (Fig. 1));

displaying a partial sentence translation on said computer system, wherein said partial sentence translation is said first phrase if said first phrase has been translated previously (displaying the translated sentence on the display device, col. 4, lines 4-6).

Adachi et al. do not teach:

determining that a word of said text segment has been previously translated by comparing said word with a database containing previously translated material; nor

determining whether a first phrase has been previously translated by comparing said first phrase with said database containing previously translated material, wherein said first phrase comprises said word and another word that is contiguous to said word in said text segment.

However, Morohasi et al. teach:

determining that a word of said text segment has been previously translated by comparing said word with a database containing previously translated material (using the process of division by longest-match by comparing the first word to a database to determine if that word has been translated, col. 8, lines 66 through col. 9, line 2).

determining whether a first phrase has been previously translated by comparing said first phrase with said database containing previously translated material, wherein said first phrase



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comprises said word and another word that is contiguous to said word in said text segment, (find the longest-match by adding clauses to the first clause, until the created clause is not found within the database, col. 9, lines 1-9).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the translation system of Adachi et al. with the longest-match process of Morohasi et al. as taught by Morohasi et al. to further increase the ability for the system to update the database without increasing the workload, (col. 13, lines 42-47).

Adachi et al. and Morohasi et al. do not teach comparing said first phrase with at least one phrase in said database.

However, Ho et al. teach an identifier that searches a first word in a database, if that word is found, the identifier then identifies the first two words, and searches for a corresponding term in the database (col. 6, lines 7-13).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Adachi et al. with the longest-match process of Morohasi et al. and with the phrase searching process of Ho et al. to increase the ability of the system to create a correct translation of the input, increasing the ability of the system to obtain the proper information from documents written in different languages, as taught by Ho et al. (page 1, lines 50-57)

As to claim 2, Adachi et al. teach a database of previously translated material (translation memory unit for storing translated sentence, col. 3, lines 12-14).

As to claim 4, Adachi et al. teach partial sentence translation memory utilize said database contained (a knowledge data base, translation unit, col. 3 lines 2-3 and Fig. 1, and 18).

As to claim 8, Adachi et al. does not explicitly teach the writeable text data software application program is selected from the group consisting of a word processor program, a spreadsheet program, a presentations program and any text program recognized by a computer.

However, Adachi et al. does teach a text input, (Fig. 1, element 12). It would be obvious to one of ordinary skill in the art at the time of the invention that the input of Adachi et al. would be made up of any text program recognized by a computer, since the input is coupled to a processing machine (col. 2, lines 63).

As to claim 9, Adachi et al. teach text data is entered into said text data program using methods selected from the group consisting of typing (a keyboard input (col. 2, lines 65-67), where it would be necessary that a keyboard input would include typing).

As to claim 11, Adachi et al. teach database of previously translated material is contained within one of said workbench program and said partial sentence translation memory, (knowledge database contained in translation unit, Fig. 1, elements 16, and 18).

As to claim 12, Adachi et al. teach database of previously translated material is contained within said partial sentence translation memory, (a translation memory unit for storing translated sentence, where every sentence is stored upon input, col. 3, lines 20-22).

As to claim 16 and 24, Adachi et al. teach the step of storing said partial sentence translations in database for later use (a translation memory unit for storing translated sentence, where every sentence is stored upon input, col. 3, lines 20-22).

As to claim 17, Adachi et al. teach a database that is stored (Fig. 1 element 16).

Adachi et al. does not explicitly teach that this is a permanent database on said computer system. However, it would be obvious to one of ordinary skill in the art to include a permanent storage method so that the translations may be kept and not lost (col. 3, liens 40-43).

As to claim 18, Adachi et al. and Morohasi et al. do not teach said database is stored on a network.

However, Ho et al. teach a database on a server.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Adachi et al. with the longest-match process of Morohasi et al. and with the phrase searching process of Ho et al. to increase the ability of the system to create a correct translation of the input, increasing the ability of the system to obtain the proper information from documents written in different languages, as taught by Ho et al. (page 1, lines 50-57).

As to claims 20 and 33, Adachi et al. do not teach the first word is the last word in said text segment.

However, Morohasi et al. teach finding the longest-match, by starting with a word, found within a database, and creating a clause by adding a word to the found word and comparing that clause to a database. When a created clause can't be found, the phrase is backtracked to the last found clause. Morohasi et al. does not explicitly teach starting from the last word first, however, it would have been obvious to one ordinary skill in the art at the time of the invention to find a phrase by starting with a found word, and either working to its right or left, making the original found word either the first or last word in the phrase, to further increase the ability for the system to update the database without increasing the workload, (col. 13, lines 42-47).

As to claim 25, Adachi et al. teach database of previously translated material is contained within said workbench program, (knowledge data base is contained within Translation unit, Fig. 1, elements 16 and 18).

As to claim 26, Adachi et al. teach database of previously translated material is contained within said partial sentence translation memory, (translation memory unit for storing translated sentence that is translation-processed, col. 3, lines 12-15).

As to claims 34, Adachi et al. teach displaying a partial sentence translation on said computer comprises displaying said second phrase if said first phrase has been translated and if said another word that is contiguous to said first phrase in said text segment has been translated (dividing a sentence into smaller parts, comparing those parts to a database to previously translated material (col. 3, lines 52-60), once a translation has been made displaying the

translated sentence on the display device, (col. 4, lines 4-6). It would be obvious that when the translated sentence is displayed all of the translated phrases would be displayed to fully display the sentence).

Adachi et al. and Morohasi et al. do not teach determining whether a second phrase has been previously translated by comparing said second phrase with said database containing previously translated material, wherein said second phrase comprises said first phrase and another word that is contiguous to said first phrase in said text segment.

However, Ho et al. teach finding a first phrase in a database, then adding another word that is contiguous to the first phrase, creating a second phrase. The second phrase checked to see if it exists in the database (col. 6, lines

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Adachi et al. with the longest-match process of Morohasi et al. and with the phrase searching process of Ho et al. to increase the ability of the system to create a correct translation of the input, increasing the ability of the system to obtain the proper information from documents written in different languages, as taught by Ho et al. (page 1, lines 50-57)

As to claim 35, Adachi et al. teach displaying a partial sentence translation on said computer, comprising displaying a plurality of context options if said first phrase has been translated in a plurality of contexts (the partial sentence translation is displayed (col. 4, lines 4-6), where the user is able to determine if the output is a bona fide translated sentence, if the sentence is not the user is able to edit the sentence to create a correct output, (col. 4, lines 21-34). It would be obvious to one of ordinary skill in the art that while the user is correcting the

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sentence the user would be able to change the context of the sentence if it is found to be incorrect to allow for a more correct output (col. 4, lines 42-44).

10. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adachi et al. in view of Morohasi et al. and Ho et al. as applied to claim 1 above, and further in view of Hargrave et al. (6,131,082).

As to claim 6, Adachi et al. Morohasi et al, and Ho et al. do not teach that the partial sentence translation application ignores punctuation and capitalization.

However, Hargrave et al. teach a source language file that is broken into a plurality of text segments. Each text segment may be a word, group of words, phrase, sentence or the like (col. 5, lines 12-15). It would be obvious to one of ordinary skill in the art at the time of the invention to notice that as Hargrave et al. teach the above, punctuation would be ignored since it would be irrelevant when pertaining to only a lone word or group of words.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Adachi et al. with the longest-match process of Morohasi et al. with the phrase searching process of Ho et al and with the segment selection process of Hargrave et al. because Hargrave et al. teach when aligned text segments are searched, translated text segments are produced (col. 5, lines 21-22).

As to claim 7, Adachi et al. Morohasi et al, and Ho et al do not teach text data is selected from a group consisting of words, phrases, characters, and symbols.

However, Hargrave et al. teach each text segment may be a word, group of words, phrase, sentence or the like (col. 5 lines 13-14).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Adachi et al. with the longest-match process of Morohasi et al. with the phrase searching process of Ho et al and with the segment selection process of Hargrave et al. because Hargrave et al. teach when aligned text segments are searched, translated text segments are produced (col. 5, lines 21-22).

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas E. Shortledge whose telephone number is (571)272-7612. The examiner can normally be reached on M-F 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571)272-7602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TS  
7/22/05

  
**RICHEMOND DORVIL**  
**SUPERVISORY PATENT EXAMINER**